

**NORTHPORT EAST NORTHPORT UNION FREE SCHOOL DISTRICT  
OFFICE OF THE SUPERINTENDENT OF SCHOOLS**

**2000/2001 CHLORDANE TESTING RESULTS**

**NORTHPORT MIDDLE SCHOOL**

1. EnviroScience to Brosnan – December 13, 2000 – Chlordane air samples Northport Middle School (1 page)
2. EnviroScience to Resca – December 18, 2000 – Chlordane soil sampling Northport Middle School (6 pages)
3. Tiffany-Bader Environmental to Brosnan – December 22, 2000 – Chlordane dust sampling Northport Middle School (8 pages)
4. EnviroScience to Brosnan – January 2, 2001 – Chlordane surface wipes, chlordane air samples Northport Middle School (2 pages)
5. EnviroScience to Brosnan – January 22, 2001 – Chlordane air samples Northport Middle School (2 pages)
6. EnviroScience to Resca – April 24, 2001 – Chlordane sampling of soil Northport Middle School (1 page)

①

**ENVIROSCIENCE CONSULTANTS, INC.**  
2150 SMITHTOWN AVENUE  
RONKONKOMA, NEW YORK 11779  
PHONE: (631) 580-3191 • FACSIMILE: (631) 580-3195

B. GALLAGHER  
C. GILBERT, Ph.D.  
T. KLUENDER  
G. NEUSCHWENDER

13 December 2000

J. DRISCOLL  
L. SAVARESE

Dr. William Brosnan, Superintendent of Schools  
Northport East Northport Union Free School District  
Post Office Box 210  
110 Elwood Road  
Northport, NY 11768

Phone: 631-262-6604 Facsimile: 631-262-6607  
Subject: Chlordane Air Samples Classrooms C 34 and D 42, Northport Middle School, December 5, 2000

Dear Dr. Brosnan:

This report describes the chlordane air samples collected in classrooms C 34 and D 42 December 5, 2000, in Northport Middle School.


**Table 1 Chlordane Air Sample Results, December 5, 2000**

Sample ID #	Location	MDL $\mu\text{g}/\text{m}^3$	Result $\mu\text{g}/\text{m}^3$
CA1	classroom 34, 1 ft above floor next to univent	0.025	< 0.025
CA2	classroom 42, 1 ft above floor next to univent	0.015	< 0.015
CA3	Field blank	0.01 /tube	< 0.01 /tube

The chlordane air samples collected in classrooms C 34 and D 42 are less than the detectable limits of  $0.015 \mu\text{g}/\text{m}^3$  and  $0.025 \mu\text{g}/\text{m}^3$ . The United States Environmental Protection Agency's Reference Concentration (RfC) for Chlordane is  $0.007 \text{ mg}/\text{m}^3$  ( $7 \mu\text{g}/\text{m}^3$ ). The United States Environmental Protection Agency estimates that inhalation of this concentration, or less, over a lifetime would not likely result in the occurrence of chronic, non-cancer effects. The EPA estimates that if an individual were to breathe air containing chlordane at  $0.01 \mu\text{g}/\text{m}^3$  over her or his entire lifetime, that this person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing chlordane.

Please contact me if you have questions at 631-580-3191 or facsimile 631-580-3195, or e-mail <chuckgilbert@envirohealth.org>.

Sincerely,

  
Charles E. Gilbert, Ph.D., M.S.,  
Toxicologist & Epidemiologist

Page 1 of 1

**ENVIRONMENTAL & INDUSTRIAL HYGIENE CONSULTANTS**  
**WWW.ENVIROHEALTH.ORG**

(2)

**ENVIROSCIENCE CONSULTANTS, INC.**  
2150 SMITHTOWN AVENUE  
RONKONKOMA, NEW YORK 11779  
PHONE: (631) 580-3191 • FACSIMILE: (631) 580-3195

B. GALLAGHER  
C. GILBERT, PH.D.  
T. KLIMNICKI  
G. NEUBCHWENDER

J. CHISCOLL  
I. RAVARONE

December 18, 2000

Mr. Anthony S. Resca  
Superintendent of Buildings and Grounds  
Northport East Northport UFSD  
P.O. Box 210  
Northport, NY 11768

Re: Northport Middle School Chlordane Sampling

Dear Mr. Resca:

Enviroscience Consultants, Inc. is reporting the preliminary results of the evaluation of the chlordane issue at the Northport Middle School. Chlordane has become an issue as a result of indoor air quality concerns at the school and the fact that chlordane had been detected in the school in the early 1980s.

Chlordane is a pesticide that was used in the United States primarily for termite control from 1948 to 1988. The production of chlordane was ceased in 1983 for most uses and was finally banned on April 14, 1988. Chlordane was typically applied at the perimeter of a structure by drilling 12 to 18 inch holes with lateral spacings of 1 to 3 feet. The chlordane was then injected into each hole to create a barrier to prevent termites from entering the area of the footprint of the building. Chlordane was used so extensively that in a study of over 1000 homes in New Jersey performed by the US Air Force and the New Jersey Department of Environmental Protection, it was found that chlordane was detected in approximately 75 percent of the homes that were constructed prior to 1988.

To address the issue at the school, Enviroscience met with school officials to review existing files and to determine which classrooms were associated with the highest indoor air quality concerns. Samples were obtained from the soil at the perimeter of eight selected classrooms (A-12, C-34, D-42, G-51, G-52, G-53, H-61, and K-73) on December 7, 2000. The samples were obtained from a distance of approximately one foot from the building wall and beneath the univent at each room. At each sample location, the samples were composited from two locations approximately three feet apart. The samples were obtained from the soil surface to a depth of approximately two inches.

The results show that of the eight samples obtained, two showed detections of chlordane (A-12 at 2.7 parts per million and C-34 at 4.1 parts per million) (see attachment A for the laboratory report). The New York State Department of Environmental Conservation has a soil guidance value for chlordane of 0.54 parts per million (as per NYSDEC Technical Administrative Guidance Memorandum 4046). Although these concentrations are considered to be minor exceedances of the guidance values, the presence of detectable levels of chlordane shows that further study is warranted to adequately evaluate the concentrations and extent of chlordane in the soil.

**ENVIRONMENTAL & INDUSTRIAL HYGIENE CONSULTANTS**  
**WWW.ENVIROHEALTH.ORG**

Anthony Resca

-2-

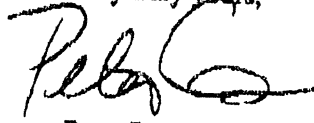
December 18, 2000

Enviroscience recommends obtaining 30 additional soil samples from the soil adjacent to most walls of the buildings. Of these samples, 26 will be obtained from shallow locations (0 to 2 inches below grade) and at two locations, the areas adjacent to rooms A-12 and C-34 where chlordane has been detected, samples will be obtained from a depth of one foot and three foot below grade to evaluate the vertical extent of chlordane.

The information from this investigation will be integrated with the indoor air sample and the wipe sample results to evaluate the potential pathways for chlordane to be entering the building if it is found that significant levels of chlordane are present.

Should you have any questions, please do not hesitate to call.

Very truly yours,



Peter Dermody  
Senior Hydrogeologist

enclosure  
pd\northportresca1



**ATTACHMENT A**

# Technical Report

prepared for

**Enviroscience Consultants, Inc.**  
2150 Smithtown Avenue  
Ronkonkoma, NY 11779  
Attention: Mr. Peter Dermody

Report Date: 12/12/2000  
**Re: Client Project ID: Northport SD**  
York Project No.: 00120159

CT License No. PH-0723   New York License No. 10854   Mass. License No. M-CT106   Rhode Island License No. 93   EPA I.D. No. CT00106

ONE RESEARCH DRIVE   STAMFORD, CT 06906   (203) 328-1371   FAX (203) 337-0166

Report Date: 12/12/2000  
Client Project ID: Northport SD

York Project No.: 00120159

Enviroscience Consultants, Inc.  
2150 Smithtown Avenue  
Ronkonkoma, NY 11779  
Attention: Mr. Peter Dermody

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 12/08/00. The project was identified as your project "Northport SD".

The analysis was conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

The results of the analysis are summarized in the following table(s).

## Analysis Results

Client Sample ID			NP-1/Rm 53		NP-2/Rm 52	
York Sample ID			00120159-01		00120159-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Chlordane	SW846-8080	mg/kg	Not detected	0.1	Not detected	0.1

Client Sample ID			NP-3/Rm 51		NP-4/Rm 73	
York Sample ID			00120159-03		00120159-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Chlordane	SW846-8080	mg/kg	Not detected	0.1	Not detected	0.1

Client Sample ID			NP-6/Rm 12		NP-8/Rm 34	
York Sample ID			00120159-05		00120159-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Chlordane	SW846-8080	mg/kg	2.7	0.1	4.1	0.1

Client Sample ID			NP-9/Rm 61		NP-10/Rm 42	
York Sample ID			00120159-07		00120159-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Chlordane	SW846-8080	mg/kg	Not detected	0.1	Not detected	0.1

**YORK**

Report Date: 12/12/2000  
Client Project ID: Northport SD

York Project No.: 00120150

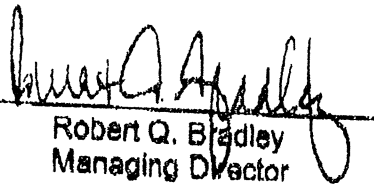
Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb  
Notes

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. If dilution factor is reported at the end of the compound list, the MDL is determined by multiplying the MDL times the listed dilution factor.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

Approved By:

  
Robert Q. Bradley  
Managing Director

Date: 12/12/2000

**YORK**

36



Tiffany-Bader Environmental, Inc.  
355 Long Lane--P.O. Box 1022  
Bedminster, New Jersey 07921-1022  
Tel: (908) 439-3937  
Tel: (212) 475-4122  
Fax: (908) 439-2213  
www.envirocenter.com/TBE  
e-mail: tbenvir@aol.com

Update 12/22/00

3

December 22, 2000

Dr. William Brosman, Superintendent of Schools  
Northport School District  
Northport, NY  
Fax 631/262-6607; PH 631/262-6604

**RE: CHLORDANE DUST SAMPLING OF NORTHPORT MIDDLE SCHOOL**

Dear Dr. Brosman:

Tiffany-Bader Environmental, Inc. (TBE) conducted sampling for chlordane, using dust wipe samples, at Northport Middle School, located in Northport, NY, on December 7 and December 19, 2000. This summary report will review the results to date, as of December 21<sup>st</sup>.

The following samples were collected: (1) 6 chlordane dust wipe samples from 5 classroom areas on December 7<sup>th</sup>; (2) 4 chlordane dust wipe samples from A-15 on December 19<sup>th</sup> [after clean-up of A-15 on December 16-17].

**December 7<sup>th</sup> Results**

As stated in the report from TBE on December 16<sup>th</sup>, five chlordane dust wipe samples were collected from classrooms on December 7<sup>th</sup>. A large surface area of approximately 1 square yard was sampled, including desks, tops of blackboards, window sills, and cabinet tops. The limit of detection for these samples were 0.250 micro-grams [ $\mu\text{g}$ ] per wipe (or 0.000250 mg per sample wipe). Four of the 5 samples showed no detectable limit. One sample, from classroom A-15, yielded a low level of 0.581 microgram per wipe. The chlordane sampling was done in response to concerns about previous application in the 1970s of this pesticide in the soil just outside the school building.

**December 19<sup>th</sup> Results**

Four chlordane dust wipe samples, including 1 field blank, were collected from classroom A-15 on December 19<sup>th</sup>. A large surface area of approximately 1 square yard was sampled. The samples were collected from the following specific areas: (1) teacher's desk; (2) three student desks; and (3) window sills. The limit of detection for these samples were 0.250 micro-grams [ $\mu\text{g}$ ] per wipe (or 0.000250 mg per sample wipe); the limit of quantification is 0.500 micro-grams [ $\mu\text{g}$ ] per wipe. Two of the 3 samples were below any quantification limit, but did show just barely trace amounts of the pesticide. One sample, from the window sill in classroom A-15, yielded a low level

IAQ / Microbial Survey  
Tiffany-Bader Environmental

Page 2  
December 22, 2000

of 1.96 microgram per wipe. This concentration is marginally higher than the December 7<sup>th</sup> sample results. This second round of sampling shows that the areas most frequented by the staff and students showed extremely low trace amounts, at concentrations just barely within extremely low levels seen by the laboratory methodology's ability to detect its presence. The one sample which yielded a quantifiable level was from the window sill. Soil sampling recently performed within the past 7 days by EnviroScience Consultants, Inc., detected low levels of this pesticide in the soil at the perimeter of the school building. The December 19<sup>th</sup> wipe sample results show that a trace amount of the pesticide was present in some dust by the window sill, and barely present on the other 2 samples. Further cleaning of the entire classroom is called for, with a focus on this specific area [the window sill], and the classroom should not be occupied until further post cleaning samples are obtained.

### Background Information

Chlordane was used as a pesticide in the United States from 1948 to 1988. In 1988, all approved uses of chlordane in the United States were canceled. Chlordane was heavily used on Long Island; the pesticide is persistent in the environment, and low levels such as found in the accumulated dust in A-15 are not considered usual for this area.

There are various standards for air sampling for chlordane; there are no standards for surface area wipe samples. The Occupational Safety & Health Administration (OSHA) has a permissible exposure limit (PEL) of 0.5 mg/m<sup>3</sup> [or 500 µg/m<sup>3</sup>]. According to the U.S. EPA, the Reference Concentration (RfC) for chlordane is 0.007 mg/m<sup>3</sup>. The U.S. Environmental Protection Agency (EPA) estimates that inhalation of this concentration or less, over a lifetime, would not likely result in the occurrence of chronic, noncancer effects. Human studies are inconclusive regarding chlordane and cancer. Animal studies have reported liver cancer in mice and male rats exposed to chlordane via ingestion. EPA has classified chlordane as a Group B2, probable human carcinogen of medium carcinogenic hazard.

IAQ / Microbial Survey  
Tiffany-Bader Environmental

Page 3  
December 22, 2000

# APPENDIX A:

## CHLORDANE DUST WIPE SAMPLES

Northport Middle School  
December 7, 2000

SAMPLE ID #	LOCATION	Concentration, ug/sample	Concentration, mg/sample
120700-501	G-51	ND	
120700-502	A-15	0.581 ug/m3	0.000581 mg/m3
120700-503	C-34	ND	
120700-504	D-42	ND	
120700-505	Guidance Rm	ND	
120700-506	Field Blank	ND	

ND = Not Detected; below the limits of detection. The limit of detection was 0.250  $\mu\text{g}$  per sample wipe.  
[ $\mu\text{g}$  = microgram; 1,000  $\mu\text{g}$  = 1 milligram (mg)].

Four of the 5 samples were below the limits of detection (or less than the quantitation limit) of the analytical technique. The limit of detection was 0.250  $\mu\text{g}$  per sample wipe, or 0.000250 mg per sample wipe. The limit of detection is defined as the amount of the material (analyte) that can be distinguished from background.



Wisconsin Occupational  
Health Laboratory

## Mail:

P.O. Box 7996  
Madison, WI 53707-7996  
Phone: (800) 446-0403

## Packages:

2601 Agriculture Dr.  
Madison, WI 53718  
Fax: (608) 224-6213

Wisconsin State Laboratory of Hygiene

University of Wisconsin

December 13, 2000

JOHN TIFFANY  
TIFFANY BADER ENVIRONMENTAL  
PO BOX 1022

Company #: 4894

BEDMINSTER NJ 07921

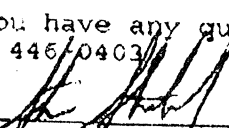
NORTHEAST MID SCHL

The results for the samples received by the lab on 12/11/00  
are as follows:

Lab#	Field#	Value	Unit	Analyte
862474	501	ND <0.250	ug/sample	Chlordane
862475	502	0.581	ug/sample	Chlordane
862476	503	ND <0.250	ug/sample	Chlordane
862477	504	ND <0.250	ug/sample	Chlordane
862478	505	ND <0.250	ug/sample	Chlordane
862479	506	ND <0.250	ug/sample	Chlordane

Report contains 1 page(s).

If you have any questions about these results, please call the lab at  
(800) 446-0403

  
Steve Strebel, Organic Supervisor

  
Mark H. H. H.



No. 0573 P. 2/2



**Wisconsin Occupational  
Health Laboratory**

Mail:  
P.O. Box 7996  
Madison, WI 53707-7996  
Phone: (800) 446-0403

Packages:  
2601 Agriculture Dr.  
Madison, WI 53718  
Fax: (608) 224-6213

Wisconsin State Laboratory of Hygiene

University of Wisconsin

**Chlordane Analysis Results**  
**Mr. John Tiffany**  
**Tiffany-Bader Environmental**  
**Project: Northport Middle School**  
**December 13, 2000**

Six gauze wipes were submitted to the Wisconsin Occupational Health Laboratory for Chlordane analysis. The samples were extracted with toluene and analyzed by gas chromatography with electron capture detection (GC-ECD).

Analysis results showed Chlordane present at a quantifiable level in one sample. No Chlordane was present at detectable levels in any of the other samples. Results were confirmed using a second column and the GC-ECD instrumentation. Two gauze pads were spiked with Chlordane and analyzed in the same way as the field samples to check recovery. The average recovery was 103%.

If you have any questions about the report, please call the lab at (800) 446-0403.

Date of analysis: 12/12/2000

APPENDIX B:

CHLORDANE DUST WIPE SAMPLES

Northport Middle School  
December 19, 2000

SAMPLE ID #	LOCATION; Classrm A-15	Concentration, ug/sample	Concentration, mg/sample
121900-701	Teacher's Desk	NQ	
121900-702	Three Student Desks	NQ	
121900-703	Window sills	1.96 ug/sample	0.00196 mg/sample
121900-704	Field Blank	ND	

NQ = Not Quantifiable; below the limits of quantification, which was 0.500  $\mu\text{g}$  per sample wipe.  
The limit of detection was 0.250  $\mu\text{g}$  per sample wipe.  
[ $\mu\text{g}$  = microgram; 1,000  $\mu\text{g}$  = 1 milligram (mg)].



Wisconsin Occupational  
Health Laboratory

Wisconsin State Laboratory of Hygiene

Mail:  
P.O. Box 7996  
Madison, WI 53707-7996  
Phone: (800) 446-0403

Packages:  
2601 Agriculture Dr.  
Madison, WI 53718  
Fax: (608) 224-6213

University of Wisconsin

December 21, 2000

JOHN TIFFANY  
TIFFANY BADER ENVIRONMENTAL  
PO BOX 1022  
355 LONG LANE  
BEDMINSTER NJ 07921-1022

Company #: 4894

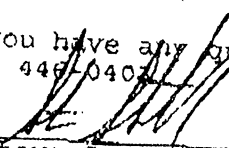
PROJ NORTHPORT  
MIDDLE SCHOOL

The results for the samples received by the lab on 12/20/00  
are as follows:

Lab#	Field#	Value	Unit	Analyte
864380	701	<=.500	ug/sample	Chlordane
864381	702	<=.500	ug/sample	Chlordane
864382	703	1.96	ug/sample	Chlordane
864383	704	ND <0.250	ug/sample	Chlordane

Report contains 1 page(s).

If you have any questions about these results, please call the lab at  
(800) 446-0403

  
Steve Strebel, Organic Supervisor

  
Mark Hudziak

Dec 21, 2000 5:33PM

No. 1026 P. 2/2



**Wisconsin Occupational  
Health Laboratory**

Mail:  
P.O. Box 7996  
Madison, WI 53707-7996  
Phone: (800) 446-0403

Packages:  
2601 Agriculture Dr.  
Madison, WI 53718  
Fax: (608) 224-6213

Wisconsin State Laboratory of Hygiene

University of Wisconsin

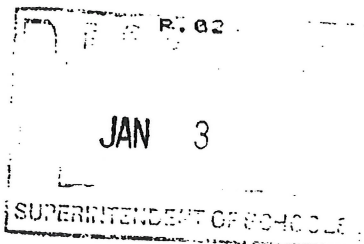
**Chlordane Analysis Results**  
**Mr. John Tiffany**  
**Tiffany-Bader Environmental**  
**Project: Northport Middle School**  
**December 21, 2000**

Four gauze wipes were submitted to the Wisconsin Occupational Health Laboratory for Chlordane analysis. The samples were extracted with toluene and analyzed by gas chromatography with electron capture detection (GC-ECD). OSHA Method 67 was used as a reference.

Analysis results showed Chlordane present at a quantifiable level in one sample, and at trace (below the minimum quantitation limit) levels in two others. Results were confirmed using a second column and the GC-ECD instrumentation. Two gauze pads were spiked with Chlordane and analyzed in the same way as the field samples to check recovery. The average recovery was 107%.

If you have any questions about the report, please call the lab at (800) 446-0403.

Date of analysis: 12/20/2000



37D

**ENVIROSCIENCE CONSULTANTS, INC.**  
 2150 SMITHTOWN AVENUE  
 RONKONKOMA, NEW YORK 11779  
 PHONE: (631) 580-3191 • FACSIMILE: (631) 580-3195

B. GALLAGHER  
 C. GILBERT, Ph.D.  
 T. KLUENDER  
 G. NEUSCHWENDER

January 2, 2001

J. DRISCOLL  
 L. SAVARESE

Dr. William Bronsnan, Superintendent of Schools  
 Northport East Northport Union Free School District  
 Post Office Box 210  
 110 Elwood Road  
 Northport, N.Y. 11768

4

Phone: 631-262-6604 Facsimile: 631-262-6607  
 Subject: Chlordane Surface Wipe Samples, Northport Middle School, December 21, 2000  
 Chlordane Air Samples, Northport Middle School, December 28, 2000

Dear Dr. Bronsnan:

This report describes the chlordane surface wipe results collected at Northport Middle School on December 21, 2000 and chlordane air sample results collected December 28, 2000.

Table 1. Chlordane Air Sample Results, December 21, 2000

Sample ID #	Location	MDL $\mu\text{g}/\text{m}^3$	Result $\mu\text{g}/\text{m}^3$
CA-1	Room A15	0.05	<0.05
CA-2	Room C30	0.07	<0.07
CA-3	Room G51	0.04	<0.04
CA-4	Room K73	0.04	<0.04
CA-5	Room L80	0.05	<0.05
CA-6	Room 104	0.05	<0.05

The results of the chlordane air samples taken are less than the detectable limits of 0.08 - 0.14  $\mu\text{g}/\text{m}^3$ . The United States Environmental Protection Agency's Reference Concentration (RfC) for chlordane is 0.007  $\text{mg}/\text{m}^3$  (7  $\mu\text{g}/\text{m}^3$ ). The United States Environmental Protection Agency's estimates that inhalation of this concentration, or less, over a lifetime would not likely result in the occurrence of chronic, non cancer effects. The EPA estimates that if an individual were to breathe air containing chlordane at 0.01  $\mu\text{g}/\text{m}^3$  over his or her entire lifetime, that this person would theoretically have no more than a one-in-a million increased chance of developing cancer as a direct result of breathing air containing chlordane.

**ENVIRONMENTAL & INDUSTRIAL HYGIENE CONSULTANTS**  
 WWW.ENVIROHEALTH.ORG

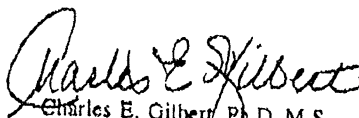
Table 2. Chlordane Surface Wipe Sample Results, December 28, 2000

Sample ID #	Location	MDL $\mu\text{g}/\text{m}^3$	Result $\mu\text{g}/\text{m}^3$
CSW-1	A15 desks A2, D2, F2	0.5	< 0.5
CSW-2	A15 west end sill	0.5	< 0.5
CSW-3	A15 teacher's desk	0.5	< 0.5
CSW-4	A15 field blank glove wipe	0.5	< 0.5

Surface wipes for chlordane are rarely, if ever, conducted in buildings since the United States Environmental Protection Agency's reference values are for food consumption (0.0005 mg/kilogram of person's body weight per day) and inhalation (0.007 mg/m<sup>3</sup> or 7  $\mu\text{g}/\text{m}^3$  for non cancer effects and 0.01  $\mu\text{g}$  over a lifetime of exposure for cancer effects). The United States Environmental Protection Agency has no guidelines or reference value for surface wipe samples. Chlordane was commonly used around buildings in the United States and Long Island to control wood boring insects. The pesticide is persistent in the environment and it is not unusual to be found on floors indoors where a building has been treated.

Please contact me if you have any questions at 631-580-3191 or facsimile 631-580-3195, or e-mail <chuckgilbert@envirohealth.org>.

Sincerely,

  
Charles E. Gilbert, Ph.D., M.S.,  
Toxicologist & Epidemiologist

CC: AM/10/11

Northport MS

**ENVIROSCIENCE CONSULTANTS, INC.**  
2150 SMITHTOWN AVENUE  
RONKONKOMA, NEW YORK 11779  
PHONE: (631) 580-3191 • FACSIMILE: (631) 580-3195

**RECEIVED**  
JAN 25 2001  
SUPERINTENDENT OF SCHOOLS

B. GALLAGHER  
C. GILBERT, PH.D.  
T. KLUENDER  
G. NEUSCHWENDER

J. DRISCOLL  
L. SAVARESE

22 January 2001

5

Dr. William Bronsnan, Superintendent of Schools  
Northport East Northport Union Free School District  
Post Office Box 210  
110 Elwood Road  
Northport, N.Y. 11768

Phone: 631-262-6604 Facsimile: 631-262-6607  
Subject: Chlordane Air Samples, Northport Middle School, January 2-3, 2001

Dear Dr. Brosnan:

This report describes the chlordane air sample results collected overnight between 3:45 PM January 2, 2001 through 8:55 AM January 3, 2001 at Northport Middle School.

Table 1. Chlordane Air Sample Results Northport Middle School, January 2-3, 2001


ID Number	Location	MDL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$
CA-1	In Room 62 by Door	0.02	< 0.02
CA-2	In Room 61 by Door	0.11	< 0.11
CA-3	Door Adjacent to Room 53A	0.08	< 0.08
CA-4	In Room 57 by Door	0.08	< 0.08
CA-5	Room 54A	0.02	< 0.02
CA-6	Room K71	0.09	< 0.09
CA-1	Room L82	0.07	< 0.07
CA-8	Room A10	0.02	< 0.02
CA-9	Room A12	0.08	< 0.08
CA-10	Room B24	0.09	< 0.09
CA-11	Room C34	0.02	< 0.02
CA-12	Gymnasium	0.02	< 0.02
CA-13	Team Locker Room	0.04	< 0.04
CA-14	Blank	0.02	< 0.02

Dr. William Bronsnan, 22 January 2001

The results of the chlordane air samples taken are less than the detectable limits of 0.02 - 0.11  $\mu\text{g}/\text{m}^3$ . The United States Environmental Protection Agency's Reference Concentration (RfC) for chlordane is 7  $\mu\text{g}/\text{m}^3$  (0.007  $\text{mg}/\text{m}^3$ ). The United States Environmental Protection Agency's estimates that inhalation of this concentration, or less, over a lifetime would not likely result in the occurrence of chronic, non-cancer effects. The EPA estimates that if an individual were to breathe air containing chlordane at 0.01  $\mu\text{g}/\text{m}^3$  over his or her entire lifetime, that this person would theoretically have no more than a one-in-a million increased chance of developing cancer as a direct result of breathing air containing chlordane.

Please contact me if you have any questions at 631-580-3191 or facsimile 631-580-3195, or e-mail <chuckgilbert@envirohealth.org>.

Sincerely,

  
Charles E. Gilbert, Ph.D., M.S.,  
Toxicologist & Epidemiologist



**ENVIROSCIENCE CONSULTANTS, INC.**

2150 SMITHTOWN AVENUE

RONKONKOMA, NEW YORK 11779-7348

PHONE: (631) 580-3191 • FACSIMILE (631) 580-3195

B. GALLAGHER  
C. GILBERT, PH.D.  
T. KLUENDER  
G. NEUSCHWENDER

P. DERMODY  
E. DETWEILER  
J. DRISCOLL  
C. MENRIGIO  
L. SAVARESE

April 24, 2001

Mr. Anthony S. Resca  
Superintendent of Buildings and Grounds  
Northport East Northport UFSD  
P.O. Box 210  
Northport, NY 11768

Re: Northport Middle School Chlordane Sampling

Dear Mr. Resca:

As a follow up to the most recent round of chlordane sampling of the soil at the Northport Middle School (as reported to you in our letter dated April 17, 2001), the most recent round of sampling showed that only two of the 14 samples obtained showed detectable levels of chlordane. The concentrations detected were well below the New York State Department of Environmental Conservation Soil Cleanup Objectives (TAGM-4046). The two detections were at the north end of the L wing and the concentrations detected were 0.19 and 0.11 mg/kg. The Soil Cleanup Objective for chlordane is 0.54 mg/kg.

Based on this information, there are no limitations for construction, excavation, or other related activities in these areas.

Should you have any questions, please do not hesitate to call.

Very truly yours,

Peter Dermody, C.P.G.  
Senior Hydrogeologist

pd\northportresca.1